# ANNOTATED FILE LISTING UNIVERSAL DATA DELIVERY FORMAT VERSION 1.05

THIS ANNOTATED FILE LISTING INCLUDES A CODE NUMBER FOR EACH FIELD.

THIS CODE NUMBER IS LOCATED BELOW THE FIRST CHARACTER IN THE FIELD. THESE NUMBERS ARE DECODED AT THE END OF THIS DOCUMENTATION.

AIRPORT DATA

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5
                                                           10
                                                                 11
|MFR | 19514.A | ANM | 1.05 |
|MEDFORD-JACKSON COUNTY AIRPORT
                                           |0721993|
5
MEDFORD
                         OREGON
      | 5 CM
                   NAVD88
                          25 CM
NAD83
       10
9
             11
                           <u>13</u>
|-17.3|0721993|
<u>14</u> <u>15</u>
| 1330.6|
         32+0
               |0721993|
   <u>17</u>
| 1352.0|
         |0721993|
422220.1 | -1225221.3 |
<u>23</u>
@
                                 RUNWAY DATA
                 3
                             5
                                                     9
                                                                 11
9
   |P|0721993|
30
   3132
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|N|0721993|
<u>3334</u>
| 422225.9460|-1225245.9050|1131639| 3146|100|0721993|
<u>35</u>
                36
                                  <u>37</u>
                                                   <u>39</u> <u>40</u>
| 1315.6|
                   |0721993|
                    43
<u>41</u>
          <u>42</u>
                                           <u>47</u>
<u>44</u>
                                 <u>46</u>
                <u>45</u>
                          |0721993|
     0 | 1304.8 |
48
       <u>49</u>
                  <u>50</u>
                           <u>51</u>
   500 | 1306.0 |
                           0721993
  1790 | 1311.0
                           0721993
                           0721993
  2380 | 1313.0 |
  2790 | 1314.0 |
                           0721993
 3146 | 1316.1
                           0721993
 3908 | 1319.0 |
                           0721993
      |P|0721993|
27
|N|0721993|
 422213.6660 | -1225207.4160 | 2931705 | 3146 | 100 | 0721993 |
  1316.1
                   |0721993|
     0 | 1316.1 |
                           0721993
   350 | 1314.0 |
                           0721993
   766 | 1313.0
                           0721993
                           0721993
  1356 | 1311.0
  2646 | 1306.0
                           0721993
  3146 | 1304.8
                           0721993
 3843 | 1298.0 |
                           |0721993|
      |P|0721993|
14
|N|0721993|
 422251.0140 | -1225234.9390 | 1584558 | 6700 | 150 | 0721993 |
  1310.1
                   |0721993|
     0 | 1294.1 |
                           0721993
 1081 | 1299.7
                           0721993
 3000 | 1310.0 |
                           |0721993|
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3730 | 1313.0 |
                    0721993
 6700 | 1330.6 |
                   0721993
32
     |P|0721993|
|N|0721993|
 422149.3290 | -1225202.6210 | 3384621 | 6700 | 150 | 0721993 |
 1330.6
              |0721993|
    0 | 1330.6 |
                    0721993
 2970 | 1313.0
                    0721993
 3700 | 1310.0
                    0721993
 5619 | 1299.7 |
                    0721993
 6700 | 1294.1 |
                    0721993
                                            NAVIGATIONAL AID DATA
                                                                               9
                                                                                       10
                                                                                                11
ASR
       (MFR)
                        422306.6000 | -1225146.7000 | 1310.0 |
                                                                         |0721993|
 <u>60</u>
                                                        64
                                                               <u>65</u>
                                                                    <u>66</u>
                         422140.0470 | -1225201.8010 |
                                                                         0721993
DME
       (14)
                                                1334.0
                         422242.4910 | -1225224.7530 |
                                                                         0721993
 GS
       (14)
                                                1297.1
                                                                     1081 | 0721993
GS
       (14) PP
                         422241.0590 | -1225229.7230
                                                                400
                                                                     3250 | 0721993
LMM
       (14)
                         422321.0000 | -1225250.6000
LOC
       (14)
                         422140.1380 | -1225157.8070 |
                                                1318.9
                                                                      998 | 0721993
LOM
       (14)
                         422703.2000 | -1225448.2000
                                                                    27420 | 0721993
VORTAC (OED)
                         422846.5000 | -1225446.7000 |
                                                2080.0
                                                                         0721993
ALS
       (14)
                                                                         0721993
APBN
                         422100.1234 | -1225100.0023
                                                                         0721993
REIL
       (14)
                                                                         0721993
MTI # 1
                         350337.2031 -895915.6612
                                                                         0721993
MTI # 2
                         350343.7826
                                    -895834.7896
                                                                         0721993
                                                                         0721993
CPME
                         350300.2394
                                    -895851.9403
RBPM
                         345414.0699 | -895513.5368
                                                                         0721993
                             OBSTRUCTION DATA (APPROACH, PRIMARY, AND MISSED APPROACH SURFACES)
                         3
                                                                               9
                                                                                       10
                                                                                                         12
                                                                                                11
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9  AV     <u>70   71</u>			
ROAD(N) <u>72</u>	422227.04 -1225254.70 1A  1313  73	8      -3      -18      650            159       78     79     80     81     82     83     84	R  -14 0721993  85 86
TREE  POLE #	422223.12 -1225305.13 1A  1347    422231.66 -1225306.69 1A  1314	42  31  16  1653    190   9  -2  -17  1662    85	
27  AV    FENCE  ANT ON BLDG #	422211.51 -1225154.02 1A  1324    422207.85 -1225142.68 1A  1352		!!!!!!
14  PIR    OL ON LTD WSK    ROAD(N)    OL ON LTD WSK    ROD ON OL TMOM    OL ON LTD WSK    ROD ON OL GS	422151.22 -1225159.92 1A  1335    422154.48 -1225212.67 1A  1334    422215.67 -1225224.01 1A  1340    422239.81 -1225222.04 1A  1317    422241.56 -1225226.38 1A  1307    422242.49 -1225224.75 1A  1349	41   25   4   -6594   258   40   24   3   -5940   * 515   46   30   9   -3632   * 531   23   7   -14   -1408   492   13   -3   -24   -1125   252   55   39   18   -1081   400	R 8 0721993 R 28 0721993 L 15 0721993 L 7 0721993
BLDG   TREE   ANT ON TWR   TREE   TREE	422256.64 -1225244.69 1A  1299    422331.15 -1225303.87 1A  1360    422337.01 -1225303.87 1A  1373    422759.80 -1225426.71 1A  2118    422819.15 -1225450.09 1A  2161	5   -11   -32   796   476   476   66   50   29   4573   552   796   337   32172   3514   867   851   830   34633   2590	R
#  32  SUPLC    ROD ON OL GS  OL ON LTD WSK  ROD ON OL TMOM  OL ON LTD WSK  ROAD(N)  OL ON LTD WSK  OL ON DME  OL ON LOC  TREE  POLE  VESSEL (A32)	422242.49 -1225224.75 1A  1349    422241.56 -1225226.38 1A  1307    422239.81 -1225222.04 1A  1317    422215.67 -1225224.01 1A  1340    422154.48 -1225212.67 1A  1334    422151.22 -1225159.92 1A  1335    422140.05 -1225201.80 1A  1339    422140.14 -1225157.81 1A  1334    422132.26 -1225151.42 1A  1357    422130.00 -1225146.32 1A  1372	18   18   -5618   400   -24   -24   -24   -5574   252   -14   -14   -14   -5291   492   9   9   9   -3067   * 531   3   3   3   -759   * 515   4   4   4   -105   258   8   8   898   283   3   3   3   998   0   26   26   26   1915   158   41   41   41   2267   432	7   0721993   15   0721993   15   0721993   16   28   0721993   17   18   0721993   17   18   18   18   18   18   18   18
#  32  ANAPC    ROD ON OL GS  OL ON LTD WSK  ROD ON OL TMOM	422242.49 -1225224.75 1A  1349    422241.56 -1225226.38 1A  1307    422239.81 -1225222.04 1A  1317		R 7 0721993

0721993

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OL ON LTD WSK
                                     422151.22 | -1225159.92 | 1A | 1335 |
                                                                                                             -105
                                                                                                                             258R
                                                                                                                                       6 | 0721993
TREE
                                     422132.26 | -1225151.42 | 1A |
                                                                   1357
                                                                                          26
                                                                                                 26
                                                                                                       26
                                                                                                             1915
                                                                                                                             158R
                                                                                                                                       -8 | 0721993
POLE
                                     422130.00 | -1225146.32 | 1A |
                                                                   1372
                                                                                          41
                                                                                                 41
                                                                                                       41
                                                                                                             2267
                                                                                                                             432R
                                                                                                                                       0 | 0721993
VESSEL
                                        OBSTRUCTION DATA (FAR-77 HORIZONTAL, CONICAL, AND TRANSITION SURFACES)
0
                     2
                                 3
                                            4
                                                        5
                                                                                          8
                                                                                                     9
                                                                                                               10
                                                                                                                           11
ARP
     HCT
 <u>70</u>
      71
OL ON LTD WSK
                                     422215.67 | -1225224.01 | 1A | 1340 |
                                                                                           9 | 18724 |
                                                                                                              10 | 0721993 |
                                                                                                      488
                                                 74
                                                              75 76
                                                                                                                  91
 <u>72</u>
                                                                               78
                                                                                      <u>87</u>
                                                                                          55 | 17700 | 1040 |
ANT AND APBN ON ATCT
                                     422210.10 | -1225224.72 | 1A | 1386 |
                                                                                                              30 | 7021993
                                                                                          -8 | 29356 |
                                                                                                             -37 | 0721993
OL ON AMOM
                                     422230.12 | -1225236.78 | 1A |
                                                                   1323
                                                                                                     1545
LT POLE
                                     422204.31 | -1225221.10 | 1A |
                                                                   1359
                                                                                          28 | 16210
                                                                                                     1594
                                                                                                               5 | 0721993
                                                                                          -4 | 25849
HANGAR
                                     422221.76 | -1225242.75 | 1A |
                                                                   1327
                                                                                                     1620
                                                                                                              -3 | 0721993
                                                                                          25 | 29618
LT POLE
                                     422232.50 | -1225238.92 | 1A |
                                                                   1356
                                                                                                     1827
                                                                                                             -12 | 0721993
                                                                                         -10 | 26256 |
TREE
                                     422224.22 | -1225252.42 | 1A |
                                                                   1321
                                                                                                     2374
                                                                                                             -23 | 0721993
                                                                                           2 | 28021 |
                                                                                                     2529
                                                                                                             -21 | 0721993
WSK ON HANGAR
                                     422231.65 | -1225251.14 | 1A |
                                                                   1333
                                                                                           3 | 14839 |
                                                                                                     2669
                                                                                                               6 | 0721993
ROAD(N)
                                     422154.48 | -1225212.67 | 1A |
                                                                                           0 | 31219 |
                                                                                                     3819
                                                                                                              -4 | 0721993
POLE
                                     422252.60 | -1225247.03 | 1A |
                                                                   1331
ANT ON OL RTR TWR
                                     422138.36 | -1225211.30 | 1A |
                                                                   1381
                                                                                          50 | 15237 |
                                                                                                     4287
                                                                                                             -29 | 0721993
TREE
                                     422257.49 | -1225249.39 | 1A |
                                                                   1327
                                                                                          -4 | 31336 |
                                                                                                     4337
                                                                                                              -5 | 0721993
POLE
                                     422305.40 | -1225232.03 | 1A |
                                                                   1326
                                                                                          -5 | 33244 |
                                                                                                     4661
                                                                                                               1 | 0721993
ANT ON OL ASR
                                     422306.62 | -1225146.74 | 1A |
                                                                   1409
                                                                                          78 | 1130 |
                                                                                                     5380
                                                                                                             -72 | 0721993
TREE
                                     422313.83 | -1225233.34 | 1A |
                                                                   1355
                                                                                          24 | 33316 |
                                                                                                     5518
                                                                                                               0 | 0721993
TREE
                                     422254.66 | -1225114.54 | 1B |
                                                                   1500
                                                                                        169|
                                                                                              3744
                                                                                                     6113
                                                                                                              19 | 0721993
TREE
                                     422314.01 | -1225306.63 | 1A |
                                                                   1374
                                                                                          43 | 31047 |
                                                                                                     6435
                                                                                                             -41 | 0721993
 TREE
                                     422239.61 | -1225047.36 | 1B
                                                                   1684
                                                                                        353 l
                                                                                              5700
                                                                                                     7323
                                                                                                             203 | 0721993
MOBILE CRANE
                                     422240.88 | -1225046.98 | 1M |
                                                                   1690
                                                                                        359
                                                                                              5606
                                                                                                     7386
                                                                                                             209 | 0721993
TREE
                                     422255.41 | -1225037.35 | 1B |
                                                                   1567
                                                                                         236
                                                                                              4802
                                                                                                     8584
                                                                                                              86 | 0721993
TREE
                                                                                              9632 | 11323
                                                                                                               9 | 0721993
                                     422134.83 | -1225003.35 | 1A |
                                                                   1490
                                                                                        159 l
                                                                                                              93 | 0721993
 TREE
                                     422107.15 | -1225014.51 | 1B |
                                                                   1574
                                                                                         243 | 11028 | 12045 |
 TREE
                                     422128.14 | -1224940.07 | 1C |
                                                                   1532
                                                                                         201
                                                                                              9609 | 13195
                                                                                                              11 | 0721993
 TREE
                                     422011.35 | -1225051.89 | 2C |
                                                                   1592
                                                                                         261 | 13526 | 14657 |
                                                                                                              59 | 0721993
                                     422110.52 | -1224921.10 | 2C |
 TREE
                                                                   1705
                                                                                        374 | 10010 | 15250 |
                                                                                                              93 | 0721993
TREE
                                     422149.06 | -1224901.02 | 2C |
                                                                                        496 | 8428 | 15359 |
                                                                                                             168 | 0721993
                                                                   1827
                                     422102.00 | -1224910.90 | 1A |
                                                                                         504 | 10136 | 16333 |
                                                                                                             173 | 0721993
TREE
TREE
                                     421959.08 | -1225029.68 | 2C | 1658 |
                                                                                        327 | 13215 | 16550 |
                                                                                                              29 | 0721993
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ANT	422057.66 -1224909.46 1A  1835		504   10245	16643	161   0721993
TRMSN TWR	422045.78 -1224919.31 1A  1691		360   10737	16666	26   0721993
VESSEL (HCT)		ĺ		į į	0721993
@					

ADDITIONAL INFORMATION

ADDITIONAL INFORMATION
100

|INFORMATION IN THIS DOCUMENTATION SHOULD NOT BE USED FOR OPERATIONAL PURPOSES.

## FIELD DESCRIPTIONS

1. AIRPORT IDENTIFIER/A6/2-7

THE SOURCE FOR THIS IDENTIFIER IS FAA ORDER 7350.\*\*, AS AMENDED.

- 2. AIRPORT SITE NUMBER/A10/9-18
- 3. FAA REGION/A4/20-23
- 4. UNIVERSAL DATA DELIVERY FORMAT VERSION/F4.2/25-28

MINOR MODIFICATIONS ARE INDICATED BY CHANGES TO THE RIGHT OF THE DECIMAL. MAJOR MODIFICATIONS ARE INDICATED BY CHANGES TO THE LEFT OF THE DECIMAL.

5. AIRPORT NAME/A70/2-71

AIRPORT NAME CURRENT AT DATE OF SURVEY

6. VERIFICATION DATE/A7/73-79

VERIFICATION DATE IS THE MOST RECENT DATE THAT DATA IN THIS RECORD WAS VERIFIED AS CORRECT. IT IS NOT NECESSARILY THE ORIGINAL SURVEY DATE.

FORMAT: DDDYYYY WHERE:

DDD = DAY OF YEAR

#### YYYY = YEAR

THE FIRST THREE NUMBERS IN THIS FIELD INDICATE THE DAY IN THE YEAR. THE LAST FOUR NUMBERS INDICATE THE YEAR. FOR EXAMPLE, 1061996 IS APRIL 15, 1996.

7. CITY/A40/2-41

ASSOCIATED CITY

8. STATE/A30/43-72

STATE (OR POLITICAL SOVEREIGNTY IF NOT A STATE)

- 9. HORIZONTAL AND ELLIPSOID ELEVATION DATUM/A10/2-11
- 10. HORIZONTAL DATUM TIE ACCURACY/A10/13-22

ACCURACIES ARE RELATIVE TO THE NATIONAL SPATIAL REFERENCE SYSTEM (NSRS) AND REPRESENT THE MINIMUM ACCURACY FOR THE DATUM TIE. BECAUSE OF VARIABLES IN THE SURVEY PROCESS, INDIVIDUAL TIES MAY BE SIGNIFICANTLY MORE ACCURATE THAN INDICATED.

ACCURACIES EXPRESSED AS A RATIO (1:10,000 ETC.) ARE RELATIVE TO THE NSRS AS A PROPORTION OF THE DISTANCE FROM THE NSRS TIE STATION. FOR EXAMPLE, A 1:10,000 TIE IS ACCURATE TO ONE FOOT FOR EACH 10,000 FEET FROM THE NSRS TIE STATION.

ALL ACCURACIES ARE AT THE 95 PERCENT CONFIDENCE LEVEL.

11. ELLIPSOID ELEVATION DATUM TIE ACCURACY/A10/24-33

ACCURACIES ARE RELATIVE TO THE NATIONAL SPATIAL REFERENCE SYSTEM (NSRS) AND REPRESENT THE MINIMUM ACCURACY FOR THE DATUM TIE. BECAUSE OF VARIABLES IN THE SURVEY PROCESS, INDIVIDUAL TIES MAY BE SIGNIFICANTLY MORE ACCURATE THAN INDICATED.

ALL ACCURACIES ARE AT THE 95 PERCENT CONFIDENCE LEVEL.

- 12. ORTHOMETRIC ELEVATION DATUM/A10/35-44
- 13. ORTHOMETRIC ELEVATION DATUM TIE ACCURACY/A15/46-60

ACCURACIES ARE RELATIVE TO THE NATIONAL SPATIAL REFERENCE SYSTEM (NSRS) AND REPRESENT THE MINIMUM ACCURACY FOR THE DATUM TIE. BECAUSE OF VARIABLES IN THE SURVEY PROCESS, INDIVIDUAL TIES MAY BE SIGNIFICANTLY MORE ACCURATE THAN INDICATED.

ALL ACCURACIES ARE AT THE 95 PERCENT CONFIDENCE LEVEL.

14. MAGNETIC DECLINATION/F5.1/2-6

EAST DECLINATION IS INDICATED BY "-"

15. VERIFICATION DATE/A7/8-14

SEE FIELD 6

- 16. AIRPORT ORTHOMETRIC (MSL) ELEVATION/F7.1/2-8
- 17. AIRPORT ELLIPSOIDAL ELEVATION/F7.1/10-16
- 18. AIRPORT ELEVATION LOCATION/A8/18-25

LOCATION OF AIRPORT ELEVATION IN FEET FROM THE INDICATED RUNWAY END. (FOR EXAMPLE, 30 + 1500 = 1500 FEET FROM THE APPROACH END OF RUNWAY 30).

19. VERIFICATION DATE/A7/27-33

SEE FIELD 6

- 20. CONTROL TOWER FLOOR ORTHOMETRIC (MSL) ELEVATION/F7.1/2-8
- 21. CONTROL TOWER FLOOR ELLIPSOIDAL ELEVATION/F7.1/10-16
- 22. VERIFICATION DATE/A7/18-24

- 23. AIRPORT REFERENCE POINT (ARP) LATITUDE/F9.1/2-10
  A NEGATIVE (-) INDICATES SOUTH LATITUDE
- 24. AIRPORT REFERENCE POINT (ARP) LONGITUDE/F9.1/12-21
  A NEGATIVE (-) INDICATES EAST LONGITUDE
- 25-29. INTENTIONALLY OMITTED
- 30. RUNWAY/A5/2-6
- 31. RUNWAY SURFACE TYPE/A1/8
  - P ... SPECIALLY PREPARED HARD SURFACE PAVED
  - S ... SPECIALLY PREPARED HARD SURFACE UNPAVED

# U ... NOT A SPECIALLY PREPARED HARD SURFACE

32. VERIFICATION DATE/A7/10-16

SEE FIELD 6

33. BLAST PAD/A1/2

Y = BLAST PAD EXISTS

N = NO BLAST PAD EXISTS

X = NOT VERIFIED

34. VERIFICATION DATE/A7/4-10

SEE FIELD 6

- 35. RUNWAY CENTERLINE END LATITUDE /F12.4/2-13
- 36. RUNWAY CENTERLINE END LONGITUDE/F13.4/15-27
- 37. RUNWAY GEODETIC AZIMUTH/17/29-35

FORMAT: DDDMMSS WHERE

DDD = DEGREES

MM = MINUTES

SS = SECONDS

AZIMUTH FROM SOUTH IF HORIZONTAL DATUM IS NAD 27

- 38. RUNWAY LENGTH/I5/37-41
- 39. RUNWAY WIDTH/I3/43-45
- 40. VERIFICATION DATE/A7/47-53

SEE FIELD 6

- 41. TOUCHDOWN ZONE ORTHOMETRIC (MSL) ELEVATION/F7.1/2-8
- 42. TOUCHDOWN ZONE ELLIPSOIDAL ELEVATION/F7.1/10-16
- 43. VERIFICATION DATE/A7/18-24

- 44. DISPLACED THRESHOLD LATITUDE/F12.4/2-13
- 45. DISPLACED THRESHOLD LONGITUDE/F13.4/15-27
- 46. DISPLACED THRESHOLD LENGTH/I7/29-35
- 47. VERIFICATION DATE/A7/37-43

SEE FIELD 6

48. RUNWAY PROFILE POINT DISTANCE FROM RUNWAY APPROACH END/15/2-6

PROFILE POINT DISTANCE FROM RUNWAY APPROACH END IDENTIFIED IN FIELD 30. RUNWAY APPROACH END IS INDICATED BY 0 FEET.

NOTE: IF A PROFILE POINT DISTANCE IS GREATER THAN THE RUNWAY LENGTH, THE POINT IS ON A STOPWAY. STOPWAY LENGTH IS EQUAL TO THE GREATEST PROFILE DISTANCE SHOWN MINUS THE RUNWAY LENGTH.

- 49. RUNWAY PROFILE POINT ORTHOMETRIC (MSL) ELEVATION/F7.1/8-14
- 50. RUNWAY PROFILE POINT ELLIPSOIDAL ELEVATION/F7.1/16-22
- 51. VERIFICATION DATE/A7/24-30

SEE FIELD 6

- 52-59. INTENTIONALLY OMITTED
- 60. NAVAID TYPE/A25/2-26

ELECTRONIC NAVAIDS, VISUAL NAVAIDS, AND RADAR COMPONENTS ARE LISTED SEPARATELY.

ELECTRONIC NAVAIDS ARE LISTED IN ALPHABETICAL ORDER BY TYPE. ILS AND MLS COMPONENTS INCLUDE THE RUNWAY SERVED IN PARENTHESIS. NON-ILS/MLS COMPONENTS INCLUDE THE NAVAID IDENTIFIER IN PARENTHESIS.

"PP" (PERPENDICULAR POINT) REFERS TO THE POINT ON THE RUNWAY CENTERLINE OR CENTERLINE EXTENDED NEAREST TO THE INDICATED NAVAID.

VISUAL NAVAIDS ARE LISTED IN ALPHABETICAL ORDER BY TYPE. VISUAL NAVAIDS INCLUDE THE RUNWAY SERVED IN PARENTHESIS. THE AIRPORT BEACON (APBN) IS THE ONLY VISUAL NAVAID CARRYING A POSITION.

FIELD 60 ALSO INCLUDES NAVAID STATUS IF KNOWN. THIS STATUS IS ABBREVIATED AS FOLLOWS:

OTS - OUT OF SERVICE, NCM - NOT COMMISSIONED, UNC - UNDER CONSTRUCTION.

IF THE UDDF FILE IS A "NAV##" FILE, FIELD 60 WILL ALSO INDICATE THE STATE WHERE THE NAVAID IS LOCATED.

- 61. NAVAID LATITUDE/F12.4/28-39
- 62. NAVAID LONGITUDE/F13.4/41-53
- 63. NAVAID ORTHOMETRIC (MSL) ELEVATION/F7.1/55-61
- 64. NAVAID ELLIPSOIDAL ELEVATION/F7.1/63-69
- 65. NAVAID OFFSET DISTANCE/I5/71-75

DISTANCE BETWEEN A NAVAID AND ITS ASSOCIATED PP.

OFFSET DISTANCES ARE LISTED ONLY FOR:

- ILS GLIDE SLOPE AND LOCALIZER ANTENNAS
- MLS ELEVATION AND AZIMUTH GUIDANCE ANTENNAS
- LOCALIZER TYPE DIRECTIONAL AID ANTENNAS
- SIMPLIFIED DIRECTIONAL FACILITY ANTENNAS

OFFSET DISTANCES ARE PROVIDED ONLY IF THE NAVAID IS MORE THAN 10 FEET OFF THE RUNWAY CENTERLINE OR CENTERLINE EXTENDED.

OFFSET DIRECTION L (LEFT) OR R (RIGHT) IS RELATIVE TO AN OBSERVER FACING FORWARD IN A LANDING AIRCRAFT.

66. NAVAID ALONG CENTERLINE DISTANCES/16/77-82

DISTANCE BETWEEN THE NAVAID PP AND THE RUNWAY APPROACH OR STOP END, DEPENDING ON NAVAID.

DISTANCE BETWEEN NAVAID PP AND RUNWAY APPROACH END IS PROVIDED FOR THE FOLLOWING NAVAIDS. A NEGATIVE DISTANCE FOR THESE NAVAIDS INDICATES THAT THE PP IS ON THE APPROACH SIDE OF THE RUNWAY APPROACH END.

- ILS GLIDE SLOPE ANTENNAS
- MLS ELEVATION GUIDANCE ANTENNAS

DISTANCE BETWEEN NAVAID PP AND RUNWAY STOP END IS PROVIDED FOR THE FOLLOWING NAVAIDS. A NEGATIVE DISTANCE FOR THESE NAVAIDS INDICATES THAT THE PP IS ON THE RUNWAY SIDE OF THE RUNWAY STOP END.

- LOCALIZER ANTENNAS
- LOCALIZER TYPE DIRECTIONAL AID ANTENNAS
- MLS AZIMUTH GUIDANCE ANTENNAS
- SIMPLIFIED DIRECTIONAL FACILITY ANTENNAS

DISTANCE BETWEEN NAVAID AND RUNWAY APPROACH END IS PROVIDED FOR THE FOLLOWING NAVAIDS. NOTE: FOR THESE NAVAIDS, THE PROVIDED DISTANCE IS FROM THE NAVAID, NOT THE PP, TO THE RUNWAY END.

- BACK COURSE MARKER ANTENNAS
- ILS MARKER BEACON ANTENNAS
- 67. VERIFICATION DATE/A7/84-90

SEE FIELD 6

- 68-69. INTENTIONALLY OMITTED
- 70. OBSTRUCTION REFERENCE/A4/2-5

OBSTRUCTION INFORMATION IS ORGANIZED INTO OBSTRUCTION BLOCKS. EACH BLOCK IS IDENTIFIED WITH A REFERENCE IDENTIFIER AND THE OBSTRUCTION IDENTIFICATION SURFACES (OIS) FOR WHICH THE SURVEY WAS ACCOMPLISHED (FIELD 71). FOR EXAMPLE, "4 AV" INDICATES THAT THE DATA IN THIS BLOCK PERTAINS TO RUNWAY 4 AND THAT THE OBSTRUCTION SURVEY WAS ACCOMPLISHED TO FAR77 VISUAL UTILITY RUNWAY OIS SPECIFICATIONS (SEE OIS CODING BELOW).

OBJECTS LOCATED WITHIN A FAR77 APPROACH OR PRIMARY AREA ARE LISTED IN AN OBSTRUCTION BLOCK WITH A RUNWAY NUMBER AS THE REFERENCE IDENTIFIER AND AN FAR77 OIS CODE.

OBJECTS LOCATED WITHIN AN AREA NAVIGATION APPROACH (ANA) CONVENTIONAL LANDING APPROACH, PRIMARY, TRANSITION, OR MISSED APPROACH AREA ARE LISTED IN AN OBSTRUCTION BLOCK WITH A RUNWAY NUMBER AS THE REFERENCE IDENTIFIER AND AN ANA OIS CODE.

IF BOTH A FAR77 AND ANA SURVEY WERE ACCOMPLISHED FOR THE SAME APPROACH, THE DATA WILL BE CARRIED IN TWO OBSTRUCTION BLOCKS, EACH SHOWING THE SAME RUNWAY NUMBER AS THE REFERENCE IDENTIFIER BUT DIFFERENT OIS CODING.

OBJECTS LOCATED WITHIN A FAR77 HORIZONTAL, CONICAL, OR TRANSITION AREA ARE LISTED IN AN OBSTRUCTION BLOCK WITH THE AIRPORT REFERENCE POINT (ARP) AS THE REFERENCE

IDENTIFIER AND "HCT" AS THE OIS CODE.

OBJECTS LOCATED WITHIN ANY HELIPORT OIS ARE LISTED IN AN OBSTRUCTION BLOCK WITH THE HELIPORT REFERENCE POINT (HRP) AS THE REFERENCE IDENTIFIER AND AN ANA VERTICAL LANDING OIS CODE.

## 71. OBSTRUCTION IDENTIFICATION SURFACE/A7/7-13

OBSTRUCTION IDENTIFICATION SURFACES (OIS) CODING FOLLOWS:

- ANAC AREA NAVIGATION APPROACH NONPRECISION, CONVENTIONAL LANDING (STANDARDS TO BE DEVELOPED)
- ANAV AREA NAVIGATION APPROACH NONPRECISION, VERTICAL LANDING (STANDARDS TO BE DEVELOPED)
- ANAPC AREA NAVIGATION APPROACH PRECISION, CONVENTIONAL LANDING, INCLUDES APPROACH, PRIMARY, TRANSITION, AND MISSED APPROACH SURFACES.
- ANAPV AREA NAVIGATION APPROACH PRECISION, VERTICAL LANDING (STANDARDS TO BE DEVELOPED)
- AV FAR77 VISUAL APPROACH UTILITY RUNWAY,
  INCLUDES APPROACH AND PRIMARY SURFACES ONLY.
- ANP FAR77 NONPRECISION APPROACH UTILITY RUNWAY,
  INCLUDES APPROACH AND PRIMARY SURFACES ONLY.
- BV FAR77 VISUAL APPROACH,
  INCLUDES APPROACH AND PRIMARY SURFACES ONLY.
- C FAR77 NONPRECISION APPROACH VISIBILITY MINIMUMS GREATER THAN 3/4 MILE INCLUDES APPROACH AND PRIMARY SURFACES ONLY.
- D FAR77 NONPRECISION APPROACH VISIBILITY MINIMUMS AS LOW AS 3/4 MILE INCLUDES APPROACH AND PRIMARY SURFACES ONLY.
- PIR FAR77 PRECISION INSTRUMENT APPROACH,
  INCLUDES APPROACH AND PRIMARY SURFACES ONLY.
- SUPLC C APPROACH UNDERLYING A BV APPROACH,
  INCLUDES APPROACH AND PRIMARY SURFACES ONLY.
- HCT FAR77 HORIZONTAL, CONICAL, AND TRANSITIONS

INCLUDES FAR77 HORIZONTAL, CONICAL, AND TRANSITION SURFACES ONLY.

NUL - OIS NOT APPLICABLE

## 72. OBJECT NAME/A30/2-31

#### MOBILE OBJECTS:

AN ESTIMATED MAXIMUM ELEVATION (EME) POINT IS PROVIDED FOR FAR77 SURVEYS AT:

- (1) THE POINT NEAREST TO THE RUNWAY APPROACH CENTERLINE END FOR PRIMARY SURFACE PENETRATIONS,
- (2) THE MOST PENETRATING POINT FOR APPROACH SURFACE PENETRATIONS, AND
- (3) AS APPROPRIATE TO REPRESENT EACH MOBILE OBJECT AREA.

AN ESTIMATED MAXIMUM ELEVATION (EME) POINT IS PROVIDED FOR ANA SURVEYS AT:

- (1) THE POINT NEAREST TO THE RUNWAY CENTERLINE AT THE THRESHOLD FOR PRIMARY SURFACE PENETRATIONS,
- (2) THE MOST PENETRATING POINT FOR APPROACH SURFACE PENETRATIONS, AND
- (3) AS APPROPRIATE TO REPRESENT EACH MOBILE OBJECT AREA.

# **VESSELS:**

VESSEL POSITIONS AND ELEVATIONS ARE NOT PROVIDED BECAUSE OF UNCERTAINTIES IN DETERMINING MAXIMUM VESSEL HEIGHTS, TRAVEL LIMITS, AND FREQUENCY OF PASSAGE.

IF A POSSIBLE VESSEL OBSTRUCTION EXIST, THE NAME "VESSEL" WILL BE ENTERED IN THE OBSTRUCTION BLOCK IN THE OBJECT NAME FIELD. FOR FAR77 STUDIES, THE GENERAL AREA OF POSSIBLE OBSTRUCTION WILL ALSO BE ENTERED IN PARENTHESIS WITH THE OBJECT NAME.

FOR VESSELS POSSIBLY OBSTRUCTING AN FAR77 APPROACH OR PRIMARY OIS, AN "A" FOLLOWED BY THE APPROPRIATE RUNWAY NUMBER, IN PARENTHESIS, WILL ALSO BE ENTERED IN THE OBJECT NAME FIELD.

FOR VESSELS POSSIBLY OBSTRUCTING AN FAR77 HORIZONTAL, CONICAL, OR TRANSITION OIS, AN "HCT" WILL ALSO BE ENTERED IN THE OBJECT NAME FIELD.

FOR VESSELS POSSIBLY OBSTRUCTING AN ANA OIS, ONLY THE NAME "VESSEL" WILL BE ENTERED IN THE OBJECT NAME FIELD.

#### **EXAMPLES:**

#### FOR FAR77 OIS:

VESSEL (A32) - VESSELS MAY OBSTRUCT THE RUNWAY 32 APPROACH OR PRIMARY OIS.

VESSEL (HCT) - VESSELS MAY OBSTRUCT AN FAR77 HORIZONTAL, CONICAL, OR TRANSITION OIS.

#### FOR ANA OIS:

VESSEL - VESSELS MAY OBSTRUCT THE APPROACH, PRIMARY, TRANSITION, OR MISSED APPROACH OIS FOR THE RUNWAY INDICATED IN THE OBSTRUCTION REFERENCE (SEE FIELD 70).

IF POSSIBLE VESSEL OBSTRUCTION IS INDICATED, USER IS ADVISED TO CONTACT LOCAL AUTHORITIES FOR MAXIMUM VESSEL HEIGHT, FREQUENCY OF PASSAGE, TRAVEL LIMITS, AND OTHER PERTINENT INFORMATION.

- 73. LATITUDE/F10.2/33-42
- 74. LONGITUDE/F11.2/44-54
- 75. ACCURACY CODE/A2/56-57

HORIZONT	AL (FT)	VERTI	CI	AL (FT)		
1 =	20	A	=	3		
2 =	50	С	=	20		
3 =	100	D	=	50		
		M	=	ESTIMATED	MAXIMUM	ELEVATION*

- \* AN ESTIMATED MAXIMUM ELEVATION IS PROVIDED WHEN THE ELEVATION OF AN OBJECT CANNOT BE DETERMINED PRECISELY, AS WITH MOBILE OBJECTS.
- 76. OBJECT ORTHOMETRIC (MSL) ELEVATION/I5/59-63
- 77. OBJECT ELLIPSOIDAL ELEVATION/I5/65-69
- 78. ABOVE GROUND LEVEL (AGL) ELEVATION/I5/71-75

AGL VALUES ARE NORMALLY PROVIDED ONLY FOR REPRESENTATIVE MANMADE OBSTRUCTIONS THAT ARE EQUAL TO OR GREATER THAN 200 FEET AGL.

79. HEIGHT ABOVE RUNWAY PHYSICAL END/I5/77-81

THIS DATA IS NOT PROVIDED FOR HCT SURVEYS.

80. HEIGHT ABOVE TOUCHDOWN ZONE ELEVATION/15/83-87

THIS DATA IS NOT PROVIDED FOR HCT SURVEYS.

- 81. HEIGHT ABOVE AIRPORT/I5/89-93
- 82. DISTANCE MEASURED ALONG RUNWAY CENTERLINE EXTENDED FROM RUNWAY PHYSICAL END TO A POINT ABEAM OBJECT/16/95-100

A NEGATIVE DISTANCE INDICATES THAT THE OBJECT IS ON THE TOUCHDOWN SIDE OF THE RUNWAY APPROACH END.

THIS DATA IS NOT PROVIDED FOR HCT SURVEYS.

83. DISTANCE MEASURED ALONG RUNWAY CENTERLINE EXTENDED FROM DISPLACED THRESHOLD TO A POINT ABEAM OBJECT/16/102-107

A NEGATIVE DISTANCE INDICATES THAT THE OBJECT IS ON THE TOUCHDOWN SIDE OF THE DISPLACED THRESHOLD.

THIS DATA IS NOT PROVIDED FOR HCT SURVEYS.

84. DISTANCE FROM RUNWAY CENTERLINE/16/109-114

SHORTEST DISTANCE FROM THE RUNWAY CENTERLINE OR CENTERLINE EXTENDED TO THE OBJECT. "L" (LEFT) OR "R" (RIGHT) IS RELATIVE TO AN OBSERVER FACING FORWARD IN A LANDING AIRCRAFT.

AN ASTERISK (\*) INDICATES THAT THIS OBJECT IS OUTSIDE, BUT WITHIN 50 FEET, OF THE OIS. THIS CONVENTION IS USED ONLY WITH FAR77 APPROACH AHD PRIMARY SURFACES.

85. PENETRATION OF INDICATED SURFACE (FIELD 71)/15/116-120

PENETRATIONS FOR OBJECTS NOTED WITH AN ASTERISK (\*) IN FIELD 84 ARE THE APPROACH SURFACE PENETRATIONS IF THE OBJECT WERE MOVED PERPENDICULAR TO THE RUNWAY CENTERLINE, TO THE APPROACH SURFACE.

WHEN ONE OIS UNDERLIES ANOTHER, THE PENETRATION IS RELATIVE TO THE LOWER OIS.

86. VERIFICATION DATE/A7/122-128

- 87. HEIGHT ABOVE AIRPORT/I5/77-81
- 88. MAGNETIC HEADING FROM ARP/I5/83-87

FORMAT: DDDMM WHERE

DDD = DEGREES

MM = MINUTES

THIS DATA IS PROVIDED ONLY FOR HCT SURVEYS.

89. DISTANCE FROM ARP/I5/89-93

THIS DATA IS PROVIDED ONLY FOR HCT SURVEY.

- 90. PENETRATION OF HORIZONTAL, CONICAL, OR TRANSITION OIS /15/95-99
- 91. VERIFICATION DATE/A7/101-107

- 92 99 INTENTIONALLY OMITTED
- 100. ADDITIONAL INFORMATION/A120/2-121